

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116, and in light of the remarks which follow, are respectfully requested.

Claims 2 and 3 have been amended at least partly in response to new issues raised in the Final Rejection. Claims 4-7 have been canceled and rewritten as new claim 29. Accordingly, claims 2, 3 and 14-29 are now pending in this application.

Claims 14-19 stand withdrawn from consideration on the merits.

Turning to the Final Rejection, claims 4-7 were rejected under 35 U.S.C. §112, second paragraph, for reasons set forth in paragraph (2) of the Office Action. Withdrawal of this rejection is respectfully requested in view of the above amendments and for at least the following reasons.

In essence, claims 4-7 have been combined into a single claim, claim 29. The new claim sets forth several process steps to selectively prepare a metallocene compound from a cyclopentadiene of formula (19b) as the starting material which is free of an isomer of formula (20b).

Applicants submit that claim 29 fully complies with the requirements of 35 U.S.C. §112, second paragraph. Accordingly, the §112 rejection should be withdrawn and such action is earnestly requested.

Claims 2, 3, 8-10, 20, 22, 23, 25, 26 and 28 were rejected under 35 U.S.C. §102(e) as anticipated by newly cited U.S. Patent No. 6,184,318 to Razavi et al. for the reasons provided in paragraph (3) of the Office Action. Reconsideration and withdrawal of this rejection are requested in view of the aforementioned amendments and for at least the following reasons.

Initially, it should be recognized that substituent R¹ of the compounds defined in the present claims is on the 2- or 5-position of the cyclopentadienyl (Cp) ring, R² is on the 3- or 4-position, R³ is on the 4- or 3-position, and R⁴ is on the 5- or 2-position. Similarly, R⁵ of the inventive compounds is on the 1- or 8-position of the fluorenyl (Flu) ring, R⁶ is on the 2- or 7-position, R¹¹ is on the 7- or 2-position, and R¹² is on the 8- or 1-position.

Razavi et al. '318 discloses the compound isopropylidene(3-phenyl-5-methyl-Cp) (Flu)ZrCl₂. Amended claim 2 specifies that when all of R⁵ to R¹² are hydrogen, R¹ and R⁴ are not both hydrogen, and R³ is a hydrocarbon other than phenyl. (R³ may also be a silicon-containing hydrocarbon group.) Thus, claim 2 excludes the aforementioned metallocene compound disclosed in the reference.

Claim 3 and new claim 29 specify that when all of R⁵ to R¹² are hydrogen, R²² is a hydrocarbon other than phenyl. Therefore, the compound of Razavi et al. '318, namely isopropylidene (3-phenyl-5-methyl-Cp) (Flu)ZrCl₂, is excluded from the scope of these claims.

For these reasons, the §102(e) rejection over Razavi et al. '318 should be withdrawn. Such action is respectfully requested.

Claims 2, 3, 8-10 and 20-28 were rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,515,086 to Razavi et al. for the reasons given in paragraph (4) of the Office Action. Reconsideration and withdrawal of this rejection are requested in view of the above amendments and for at least the reasons which follow.

The substituents in the metallocene compounds prepared in Examples 1-8 of this reference are summarized in the following table:

	fluorenyl		cyclopentadienyl		Bridge portion	
Position	3-R ⁷	6-R ¹⁰	3-R ⁵ or R ²²	5-R ¹ or R ²¹	R ¹⁴	R ¹⁵
Ex. 1	t-Bu	t-Bu	t-Bu	Me	Me	Me
Ex. 2	t-Bu	t-Bu	Me		Me	Me
Ex. 3	t-Bu	t-Bu	t-Bu		Me	Me
Ex. 4A	t-Bu	t-Bu	TMS		Me	Me
Ex. 4B	t-Bu	t-Bu	TMS		Ph	Ph
Ex. 5	t-Bu	t-Bu	Me	Me	Me	Me
Ex. 6	t-Bu	t-Bu	Me		Ph	Ph
Ex. 7	t-Bu	t-Bu	t-Bu		Ph	Ph
Ex. 8	t-Bu	t-Bu	TMS		Ph	Ph

TMS: trimethylsilyl

Amended claim 2 specifies that when R⁷ and R¹⁰ are both tert-butyl and R⁵, R⁶, R⁸, R⁹, R¹¹ and R¹² are all hydrogen, R³ cannot be methyl, tert-butyl or trimethylsilyl. Amended claim 3 and new claim 29 specify that when R⁷ and R¹⁰ are both tert-butyl, and R⁵, R⁶, R⁸, R⁹, R¹¹ and R¹² are al hydrogen, R²² is not methyl, tert-butyl or trimethylsilyl. Accordingly, the compounds specifically disclosed in the Examples of Razavi et al. '086 are excluded from the amended claims.

In view of the above amendments and remarks, the §102(e) rejection over Razavi et al. '086 should be withdrawn. Such action is earnestly solicited.

Applicants respectfully request that the present amendments be entered and considered. Entry of the amendments will place this application in allowable condition or better condition for appeal. Since the Final Rejection contains new grounds of rejection, the present Amendment represents the first opportunity for Applicants to respond to the new grounds of rejection.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at his earliest convenience.

Respectfully submitted,

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